

GRC Payload Safety Work Group

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Jerri Ling
William Schoren

PBMA Communities of Practice IV Workshop
November 14-17, 2005

Our Work Group

Glenn Research Center Payload Safety

- GRC Payload Safety group is composed of system safety engineers working primarily on payloads that fly on the Shuttle or International Space Station carriers
- Membership includes civil servant and support service contractor safety professionals working at GRC

History of GRC Payload Safety Work Group

- Began life as a Standard Security Work Group
- Was the first standard security work group to migrate to Enhanced Security Work Group status for PBMA
- Established as a ESWG in July 2004

Support to JSC

March 2005

- GRC safety group first learned of the request for SMA support from NASA JSC

April 2005

- 3 SAIC & ESA contractors traveled to Houston to provide safety, quality, and software assurance expertise to JSC/Code NT (*Government Furnished Equipment*)
- Planned initial time duration - 4 weeks
- Delay of STS-114's launch from May 2005 to July 2005 started the rotation of GRC safety personnel

Activities at JSC/Code NT

- Acquired and archived Code NT policy documents and governing safety requirements
- Reviewed and provided comments to the Risk Assessment Executive Summary Reports (RAESRs), FMEA/CILs, and hazard reports
- Provided comments to assigned System Safety Engineers (SSE)
- Supported Safety and Mission Assurance Review Team (SMART) reviews

Activities at GRC

- Safety engineer at JSC posted documents for review in weekly folders
- Jerri Ling had overall responsibility for determining document review assignments
- Documents were placed into the individuals' folders
- Information for the SMART meetings and assigned SSEs were posted on the SMART Meetings calendar
- Safety engineers at GRC reviewed documents and sent comments to the safety engineer at JSC

Specific Features We Used from the Work Group

- External Links
 - Document Library
 - Calendar
-
- Databases

How Our PBMA Work Group Helped Us Support Return to Flight

- We were able to continue support even though the number of personnel at JSC was reduced to a minimum
- We were able to share large files between centers that might not be sent through regular e-mail channels
- We had a single, secure source where all members of our team could access useful links, documents and forms, and were not restricted by NASA firewalls
- Was very easy to use by our team

Future Use

- There may be opportunities for future collaborations between GRC and other centers
- This could become a tool for training future system safety engineers at GRC

Issues

- Work groups now have more capabilities than before – our group needs to learn more and better ways to use this valuable resource
- We haven't decided on the types of knowledge artifacts we can produced for use by the entire team

Thank You!

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[Useful Links for Safety Verification Audits](#)

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EME panel website - contains Tailoring/Interpretation Agreements (TIAs) for EMI

[Useful Links for Safety Verification Audits](#)

■ [NT/Flight Equipment Division document webpage](#)

Location of various NT documents

[GFE Specific Links](#)

■ [EA1/Engineering Directorate document webpage](#)

Location of various EA documents.

[GFE Specific Links](#)

■ [Acronym Central](#)

A must-have site for understanding what are the different acronyms. Results are broken down by SSP, ISS, etc.

[GFE Specific Links](#)

Document Library

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	JSC Form 1380 - EVA Punch Tool1.doc ♦	51 KB
	week of 7-4-05 data packs	
	JSC Form 1380 - Plug Repair Box1.doc	51 KB
	week of 7-4-05 data packs	
	JSC 62482 - Plug Repair Box RAESR - Phase II.doc ♦	460 KB
	week of 7-4-05 data packs	
	JSC 62483 - EVA Punch Tool RAESR - Phase II.doc ♦	417 KB
	week of 7-4-05 data packs	
	GFE Sample Repair Box RAESR (BW) 6-22-05/Phase	1,330 KB

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Sep 8, 2005

10:40 AM

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EME panel website - contains Tailoring/Interpretation Agreements (TIAs) for EMI

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[NT/Flight Equipment Division document webpage](#)

Location of various NT documents

Apr 13, 2005

9:51 AM

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Location of various EA documents.

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9:50 AM

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A must-have site for understanding what are the different acronyms. Results are broken down by SSP, ISS, etc.

Apr 13, 2005

9:49 AM

[GFE Specific Links](#)

[SSPWEB](#)

Overall starting point for Shuttle information, documents, and news.

Apr 13, 2005

9:47 AM

[GFE Specific Links](#)

[Orbiter Project Office](#)

[GFE Specific Links](#)

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9:45 AM



[Multiple SMA Databases for Shuttle and Station](#)

Has Shuttle HRs, Flight Rules, CILs, PRACAs, etc.

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9:44 AM

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46 KB

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[CHeCS OCAD Audit-review.xls](#)

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3,302 KB

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7,465 KB

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1,928 KB

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**Weekly Organization
Of Safety Products****Documents to Aid Reviews**[Jump to...](#)[Favorites](#)grc-payload-safety (1/8) [Who's On](#)Status: [Online](#)

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Folders



Folder Description :

Safety packages to be reviewed by Bill Schoren.

View: [List](#)


 OAF HA 3	63 KB	Jun 14, 2005		
 OAF HA 2	87 KB	Jun 14, 2005		
 OAF HA 1	80 KB	Jun 14, 2005		
 SP-1 Post phase 3 HR	575 KB	Jun 14, 2005		
 SP-1 phase 3 SAR	1,241 KB	Jun 14, 2005		

Documents to Review
within B. Schoren's Folder

<https://secureworkgroups.grc.nasa.gov/grc-payload-safety?qo=z8326>

NASA Official: Steve Newman
Site Curator: Jeffrey Hawley
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Folders

View: **List** [JF1380 form.doc](#) 


37 KB Apr 12, 2005

 [JF1477 form.doc](#) 


233 KB Apr 12, 2005

 [JF1477A.doc](#) 

52 KB Apr 12, 2005

 [JF1544 form.doc](#)


67 KB Apr 12, 2005

 [jf1296 GCAR.doc](#)

219 KB Apr 8, 2005

**Code NT Forms**<https://secureworkgroups.grc.nasa.gov/grc-payload-safety?qo=z8000>

NASA Official: Steve Newman
Site Curator: Jeffrey Hawley
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	JSC 17481B	858 KB	Apr 12, 2005			
	NTGFE010b.pdf	50 KB	Apr 8, 2005			
	NTGFE012a.pdf	52 KB	Apr 8, 2005			
	NTGFE014.pdf	49 KB	Apr 8, 2005			
	NTGFE015.pdf	72 KB	Apr 8, 2005			
	EA-WI-016.doc	224 KB	Apr 8, 2005			
	ea-wi-023.doc	2,442 KB	Apr 8, 2005			
	EA-WI-025.doc	559 KB	Apr 8, 2005			
		56 KB	Apr 8, 2005			
		95 KB	Apr 8, 2005			
	JSC28484.pdf	148 KB	Apr 8, 2005			
	JSC 17038.doc	85 KB	Apr 8, 2005			
	NSTS37310.pdf	97 KB	Apr 8, 2005			
	NSTS 22206.pdf	275 KB	Apr 8, 2005			
	NTGFE002b.pdf	60 KB	Apr 8, 2005			
	NTGFE005pcn-2.pdf	41 KB	Apr 8, 2005			
	NTGFE007c.pdf	74 KB	Apr 8, 2005			

Code NT Requirements Documents

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SMART Meetings



SMART Meetings

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May



11



2005

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May 2005

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SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5 OBSS SENSOR PAC PAN/TILT UNIT U	6	7
8	9	10 (RCC) Crack Rep RCC Repair Rule Type A Duromete EVA Marker	11 Brief Topics Volatile Organi	12 O2 Contingency	13 ADVANCED CREW E	14
15	16	17 CRACK REPAIR BA RCC CRACK REPAI EVA THERMAL SEN	18 Brief Topics	19 Remote Manipula Vibe Experiment Extravehicular	20	21

Typical Monthly Listing
of SMART Meetings

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June



24



2005

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Friday, Jun 24, 2005

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Multi-Day Calendar Entries

12:00 AM

1:00 AM

2:00 AM

3:00 AM

4:00 AM

5:00 AM

6:00 AM

7:00 AM

8:00 AM

9:00 AM

10:00 AM

Shuttle Cycle Ergometer, Review of SCE-001, Cause E Modification

10:00 AM - 10:30 AM

SSE: N. Miller room 128

A31p Laptop Computer Assembly, Discussion of Touch Temperature Analysis Controls

10:30 AM - 11:00 AM

SSE: A. Noblitt Room 128

Individual Meeting Events Showing
Times, Locations, and Responsible SSEs

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Contacts Summary



























Database of SSEs and
Other Contacts at JSC

✓☆☆☆

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28 List Entries

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1 of 2[Search current view](#)[Filter](#)

	First name ▾	Last name ▾	E-mail address ▾	Phone ▾	Date Modified ▲
  	Robert	Abshier	robert.v.abshier1@jsc.nasa.gov	281-244-1844	May 6, 2005 2:41 PM
  	Chris	Adamek	christopher.d.adamek1@jsc.nasa.gov	281-244-1610	May 6, 2005 2:51 PM
  	Cheryl	Corbin	cheryl.a.corbin1@jsc.nasa.gov	281-244-1830	May 6, 2005 2:52 PM
  	Todd	Cureton	phillip.t.cureton1@jsc.nasa.gov	281-483-4284	May 6, 2005 2:53 PM
  	Jeff	Dadd	jeffrey.s.dadd1@jsc.nasa.gov	281-483-9720	May 6, 2005 2:54 PM
  	Mike	Dang	vu.a.dang1@jsc.nasa.gov	281-483-3206	May 6, 2005 2:55 PM
  	George	Fletcher	george.w.fletcher1@jsc.nasa.gov	281-244-1932	May 11, 2005 11:40 AM
  	Jeremy	Gernand	jeremy.m.gernand1@jsc.nasa.gov	281-483-9424	May 11, 2005 11:42 AM
  	Carlos	Go Boncan	gil.carlos.s.goboncan1@jsc.nasa.gov	281-244-1902	May 11, 2005 11:43 AM
  	John	Go Boncan	john.s.goboncan1@jsc.nasa.gov	281-244-1628	May 11, 2005 11:44 AM
  	Doug	Harris	robert.d.harris1@jsc.nasa.gov	281-244-1923	May 11, 2005 11:45 AM
  	Kalisha	Hudson	kalisha.j.hudson-bennett1@jsc.nasa.gov	281-483-6327	May 11, 2005 11:46 AM

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